

that all the productions and appearances of Colours in the World are derived not from any physical change caused in Light by refraction or reflexion, but only from the various mixtures or separations of rays, by virtue of their different Refrangibility or Reflexibility. And in this respect the Science of Colours becomes a Speculation as truly mathematical as any other part of Optiques. I mean so far as they depend on the nature of Light, and are not produced or altered by the power of imagination, or by striking or pressing the Eyes.

THE

THE  
SECOND BOOK  
OF  
OPTICKS.

PART III.

*Of the permanent Colours of natural Bodies, and the Analogy between them and the Colours of thin transparent Plates.*

I Am now come to another part of this Design, which is to consider how the Phænomena of thin transparent Plates stand related to those of all other natural Bodies. Of these Bodies I have already told you that they appear of divers Colours, accordingly as they are disposed to reflect most copiously the rays originally indued with those Colours. But their Constitutions, whereby they reflect some rays more copiously than others, remains to be discovered, and these I shall endeavour to manifest in the following Propositions.

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PROP.